LineUp With Math™ Alignment
Essential Academic Learning Requirements
And Grade Level Expectations

EALR 1: The student understands and applies the concepts and procedures of mathematics.

Component 1.1: Understand and apply concepts and procedures from number sense.

NUMBER AND NUMERATION

GLE 1.1.4 Apply ratio, percent, and direct proportion in situations.

Evidences of Learning	***LineUp With Math*™ Activities**
▪ Solve problems involving ratio and proportion (e.g., similar figures, scale drawings, rates, …).	--Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control. --Use percent relationships to resolve distance, rate, time conflicts in air traffic control.
▪ Solve problems involving percentages (e.g., percent increase/decrease, tax, commission, discount)	--Use percent relationships to resolve distance, rate, time conflicts in air traffic control.

ESTIMATION

GLE 1.1.8 Apply estimation strategies to predict or determine the reasonableness of answers in situations involving computation on rational numbers in any form including whole number powers and square roots of square numbers.

Evidences of Learning	***LineUp With Math*™ Activities**
▪ Use estimation to predict or to verify the reasonableness of calculated results.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

Component 1.2: Understand and apply concepts and procedures from measurement.

ATTRIBUTES, UNITS, AND SYSTEMS

GLE 1.2.2 Understand and apply derived units of measurement.

Evidences of Learning	***LineUp With Math*™ Activities**
▪ Explain the concept of a rate.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios. --Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.
▪ Use rate to determine a measured outcome.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.

EALR 2: The student uses mathematics to define and solve problems.	
Component 2.1: Understand problems.	
GLE 2.1.1 Analyze a situation to define a problem.	
Evidences of Learning	***LineUp With Math™* Activities**
▪ Define the problem.	--Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.
Component 2.2: Apply strategies to construct solutions.	
GLE 2.2.1 Apply strategies, concepts, and procedures to devise a plan to solve the problem.	
Evidences of Learning	***LineUp With Math™* Activities**
▪ Select and apply appropriate mathematical tools for a situation.	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.
GLE 2.2.2 Apply mathematical tools to solve the problem.	
Evidences of Learning	***LineUp With Math™* Activities**
▪ Implement the plan devised to solve the problem.	--Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.
▪ Check the solution to see if it works.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

EALR 3: The student uses mathematical reasoning.	
Component 3.2: Make predictions, inferences, conjectures, and draw conclusions.	
GLE 3.2.1 Apply prediction and inference skills to make or evaluate conjectures.	
Evidences of Learning	***LineUp With Math™* Activities**
	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.
GLE 3.2.2 Apply the skills of drawing conclusions and support the conclusions using evidence.	
Evidences of Learning	***LineUp With Math™* Activities**
▪ Draw conclusions from displays, texts, or oral discussions and justify those conclusions with logical reasoning or other evidence.	--Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

Component 3.3: Verify results	
GLE 3.3.1 Analyze procedures and information used to justify results using evidence.	
Evidences of Learning ▪ Use estimation to predict or to verify the reasonableness of calculated results.	***LineUp With Math™* Activities** --Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.

EALR 4: The student communicates knowledge and understanding in both everyday and mathematical language.	
Component 4.1: Gather information.	
GLE 4.1.2 Synthesize information from multiple sources using reading, listening, and observation.	
Evidences of Learning ▪ Model the relationship with a table or graph given a description of, or an equation for, a situation involving an inequality or linear relationship.	***LineUp With Math™* Activities** --Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.
Component 4.2: Organize, represent, and share information.	
GLE 4.2.2 Apply communication skills to clearly and effectively express or present ideas and situations using mathematical language or notation.	
Evidences of Learning ▪ Clearly explain, describe, or represent mathematical information in a pictorial, tabular, graphical, two- or three-dimensional drawing, or other form as appropriate for the mathematical information (e.g., time, distance, categories), audience, and/or purpose, such as to perform or persuade, with notation and labels as needed.	***LineUp With Math™* Activities** --Use an interactive simulator plus calculation worksheets to model and resolve air traffic control conflicts.

EALR 5: The student understands how mathematical ideas connect within mathematics, to other subject areas, and to real-life situations.	
Component 5.1: Relate concepts and procedures within mathematics.	
GLE 5.1.1 Apply concepts and procedures from a variety of mathematical areas in a given problem or situation.	
Evidences of Learning ▪ Solve problems involving ratio and proportion (e.g., similar figures, scale drawings, rates…).	***LineUp With Math™* Activities** --Use an interactive simulator plus calculation worksheets to apply proportional reasoning to identify and resolve distance, rate, time conflicts in air traffic control.

Component 5.3: Relate mathematical concepts procedures to real-world situations.	
GLE 5.3.1 Understand that mathematics is used in daily life and extensively outside the classroom.	
Evidences of Learning ▪ Use estimation to predict or to verify the reasonableness of calculated results.	***LineUp With Math™* Activities** -Predict and resolve aircraft conflicts and explain results of mathematical calculations and simulations.
GLE 5.3.2 Understand that mathematics is used within many occupations or careers.	
Evidences of Learning ▪ Explain how mathematics is used in careers or occupations of interest (e.g., complete a mathematically based project).	***LineUp With Math™* Activities** --Apply mathematics to solving distance, rate, and time problems for aircraft conflict scenarios.